

Multi-Platform Development with PhoneGap



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OF TIKAL KNOWLEDGE

All pictures provided by
<http://openclipart.org>

Multiplatform Framework Options



- **Xamarin**

- Paid framework for developing apps for iOS and Android using c# and .net

- **Titanium**

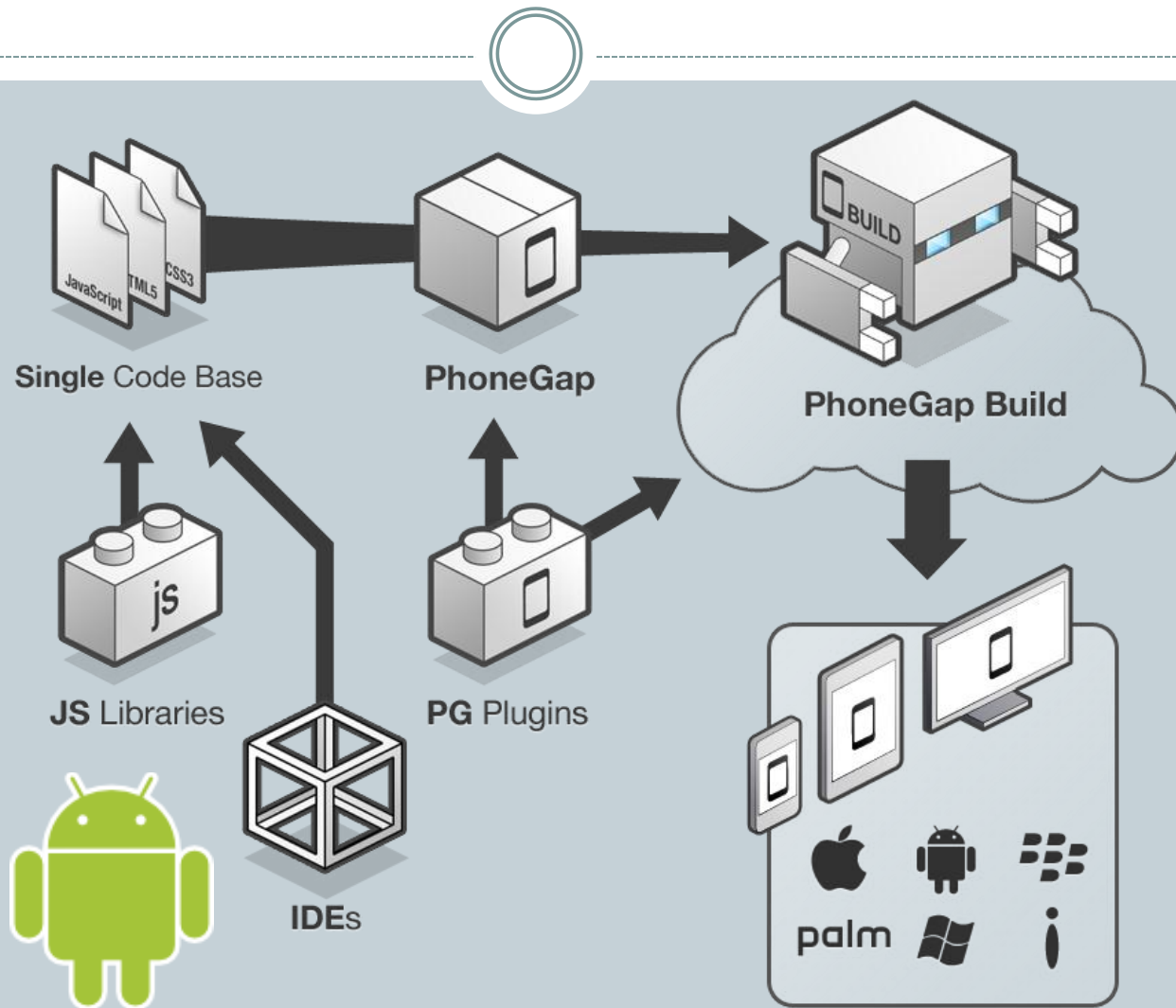
- Mobile framework for developing for iOS, Android, BlackBerry, using JavaScript syntax with pre-interpreted code

- **PhoneGap**

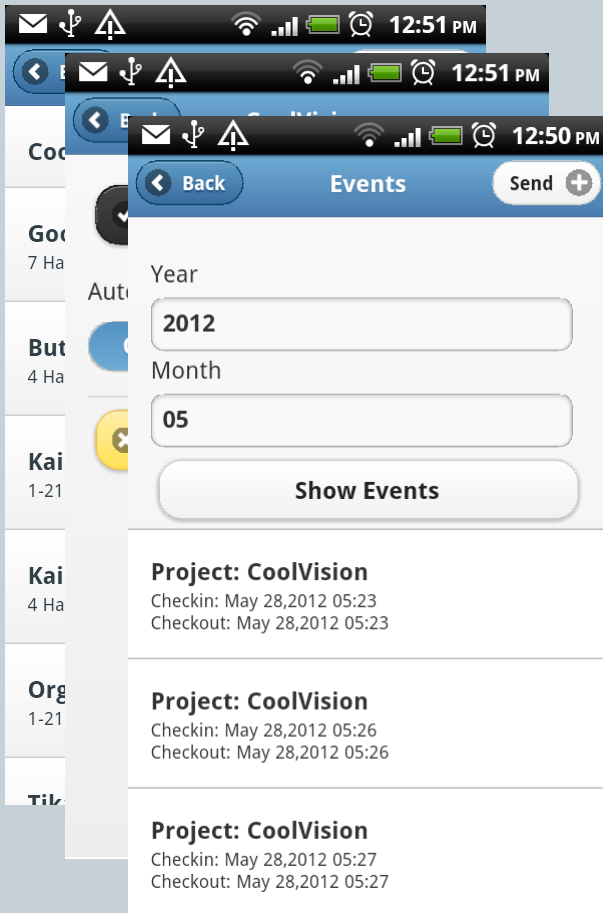


- An open source, mobile development framework utilizing HTML5, JavaScript, and other web technologies.

What is a PhoneGap?



UI

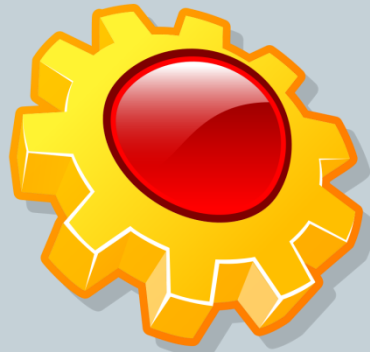


```
</head>
<body onload="onBodyLoad()">

  <div data-add-back-btn="true" data-role="page" id="mainPage">
    <div data-role="header" data-position="fixed" data-theme="b">
      <a href="#eventsPage" data-icon="grid" data-iconpos="left"
        class="ui-btn-left" data-theme="c">Events</a> <a
        onClick="retrieveLocations();" data-icon="plus" data-iconpos="right"
        class="ui-btn-right" data-theme="c">Add</a> <span class="ui-title">My
        Projects</span>
    </div>
    <ul class="lstMyProjects" data-role="listview" data-split-icon="gear"
      data-split-theme="d">
    </ul>

    <script id="projectItem" type="text/x-jquery-tmpl">
    <li>
      <a onclick="showMapForLocation('${fid}');" >
      <h3>${name}</h3>
      <p>${address}</p>
      </a>
      <a onclick="doShowProjectOptions('${fid}');" >${name}</a>
    </li>
    </script>
  </div>
```

Backend



Plugins



- Allow hooks for JavaScript to access native OS code
 - Return data by hook backs to JS from native code
- Large library of premade plugins
- Easy steps to create your own custom plugins
- Ability to have consistent JS API for all platforms
 - Allowing for different native implementations
 - Can also have different JS APIs and determine product for extra abilities

The Good



- Quick development
 - Prototyping
 - User Testing
 - Proof of concept
- Develop once for many platforms
- Central code base
- Plugins
- Reuse any web based code
- Updates often
- Mobile JS/web libraries
 - JQuery mobile, Sencha Touch, etc

Pitfalls



- Webby touch and feel
- Plugins++ == heavy
- Debugging Javascript
 - iPhone - iWebinsepector, Safari iOS6, Weinre
 - Android/Blackberry/WebOs – Weinre (on for specific versions of OS)
- Changes in OS can break things
 - iOS 5.1 deleting local storage
- Background actions

Live Demo



- These things never go wrong
- Eclipse, ADT, Android SDK
- PhoneGap SDK
- Applaud (optional)

<http://devgirl.org/2012/07/25/fast-phonegap-development-for-android-with-applaud/>